*FIG.1A*

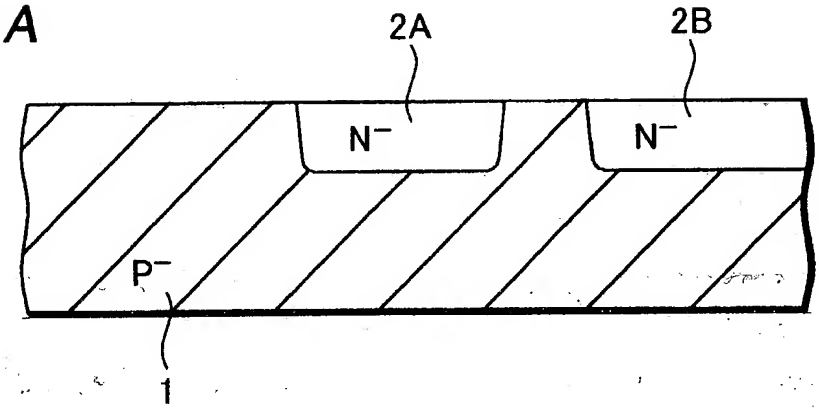



*FIG.1B*

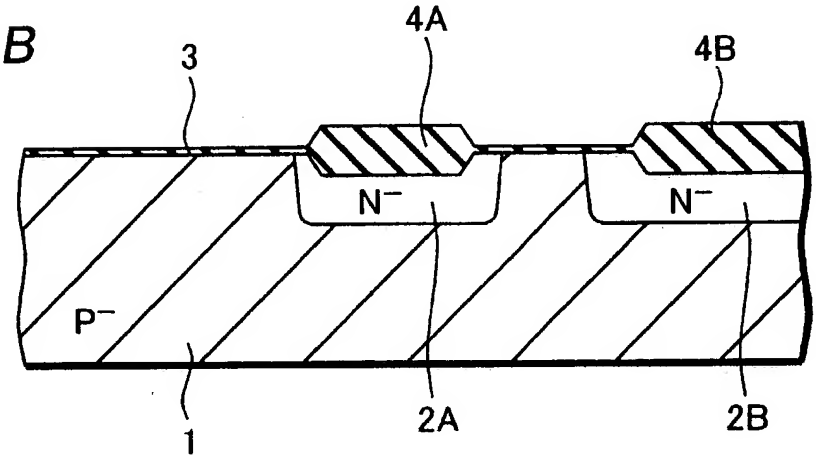



*FIG.1C*

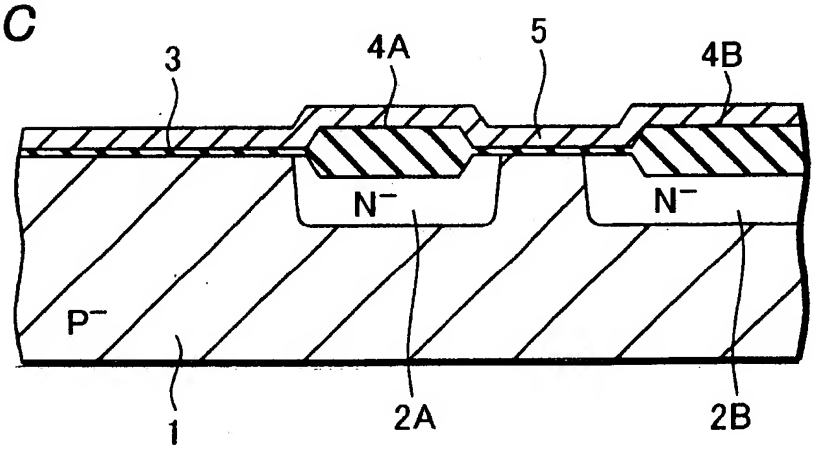


*FIG.2A*

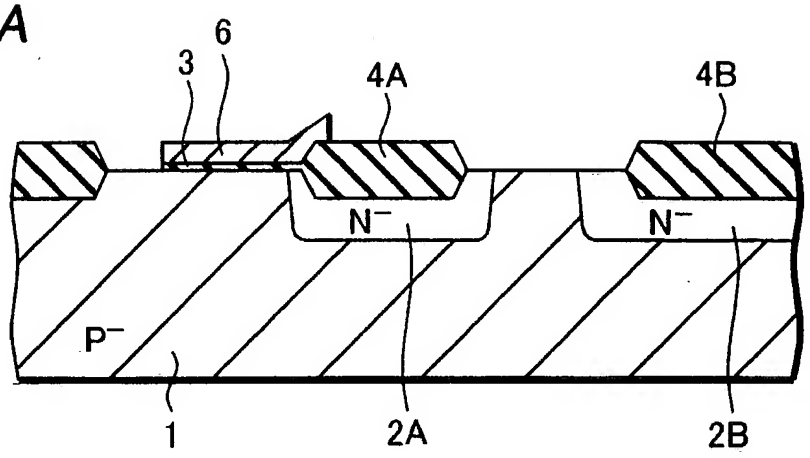



*FIG.2B*

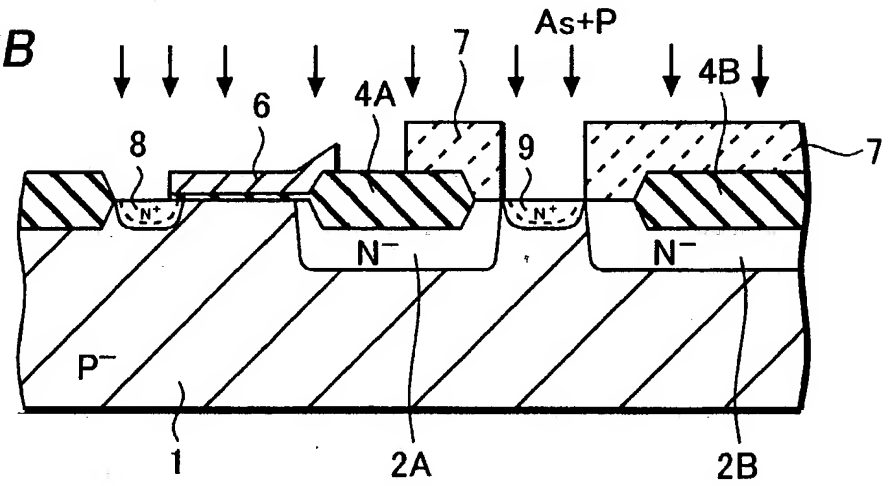



*FIG.2C*

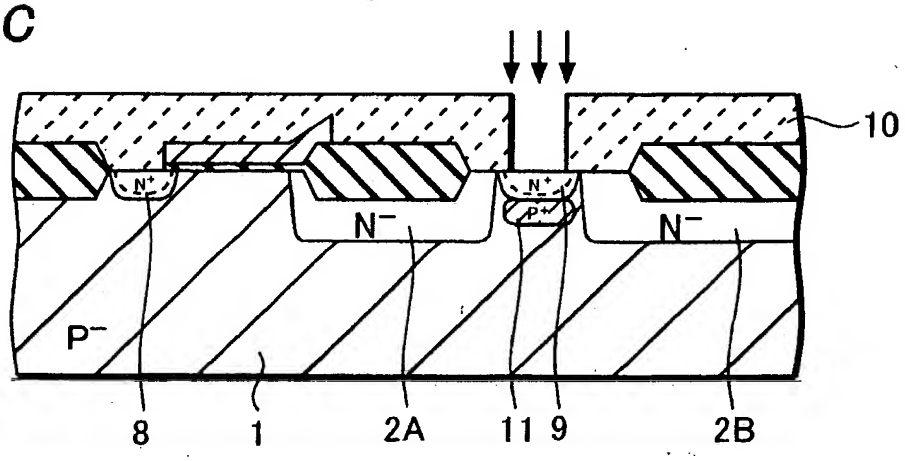


*FIG.3A*

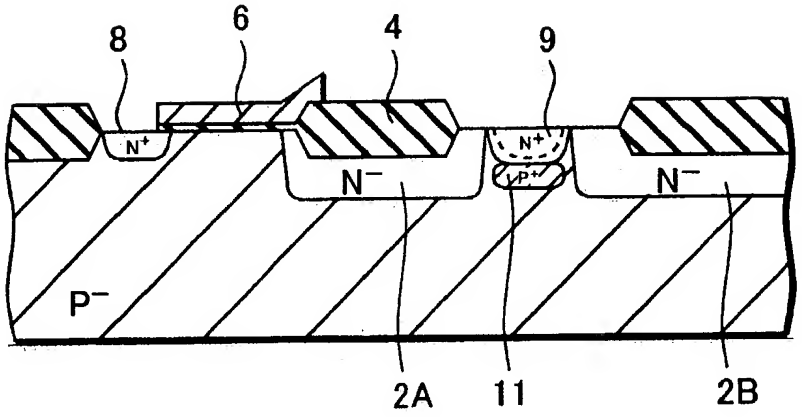



*FIG.3B*

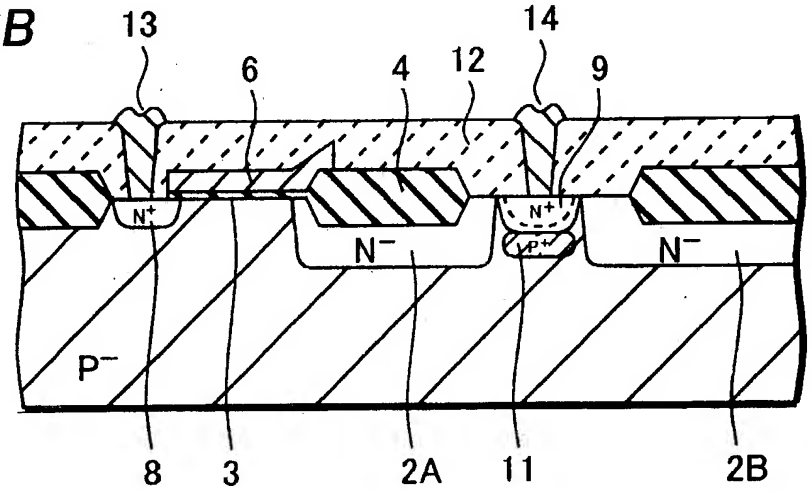


*FIG.4*

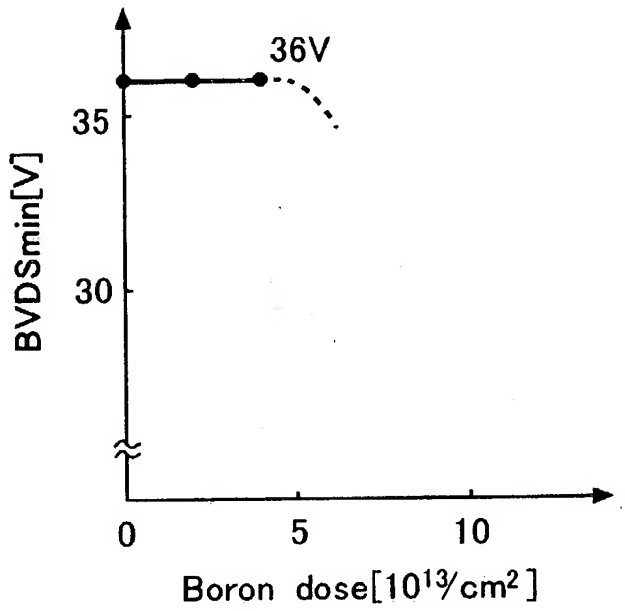

36V
35
30
BVDSmin[V]
0
5
10
Boron dose[10¹³/cm²]

*FIG.5*

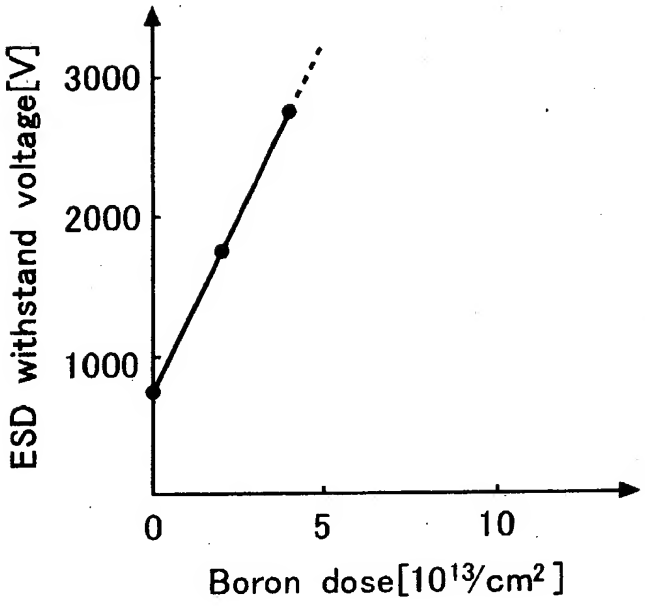

3000
2000
1000
ESD withstand voltage[V]
0
5
10
Boron dose[10¹³/cm²]

*FIG.6A*

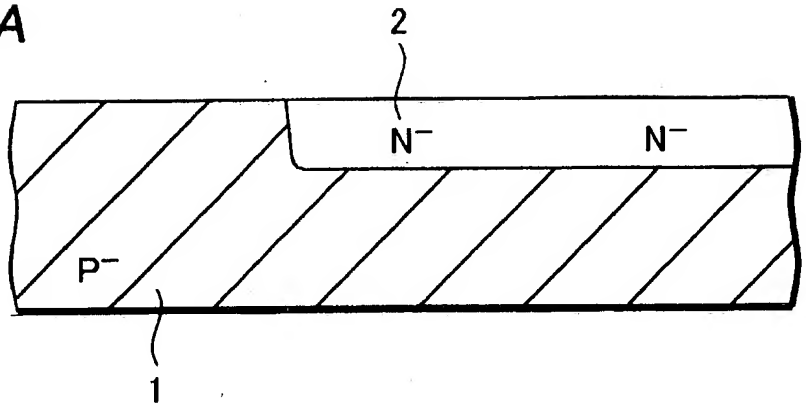



*FIG.6B*

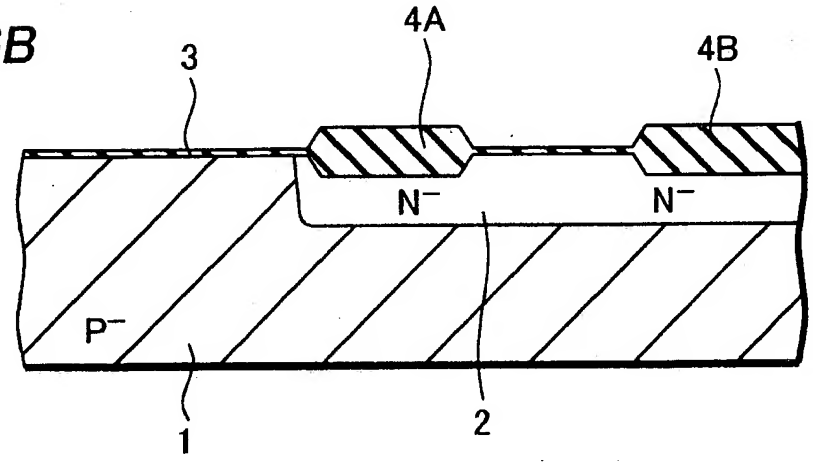



*FIG.6C*

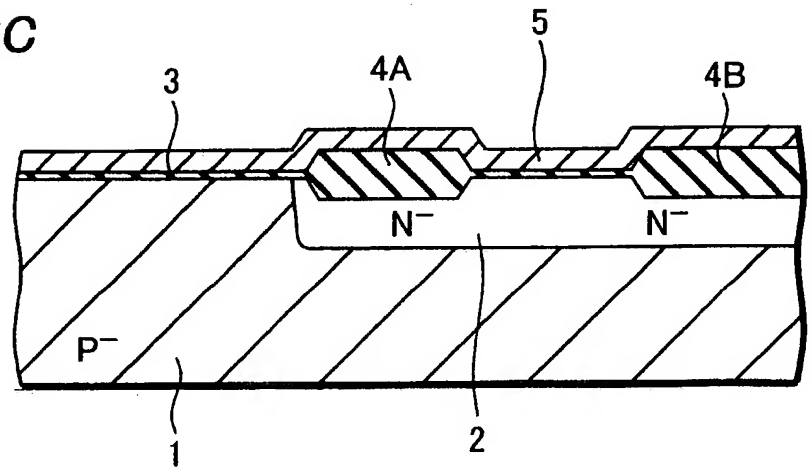


FIG.7A

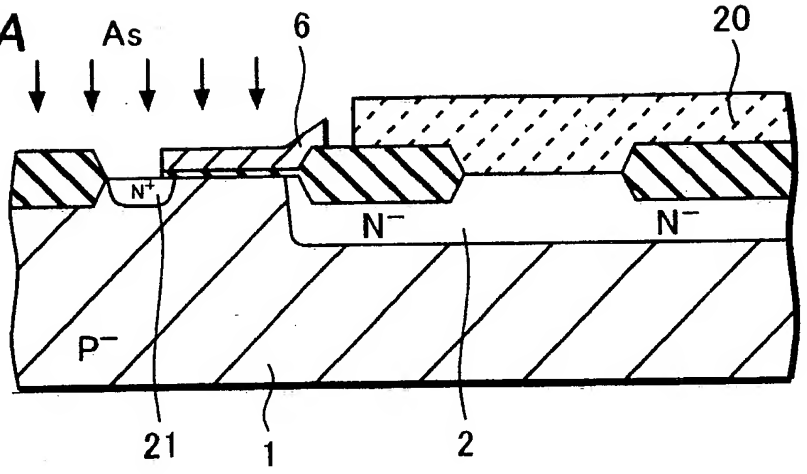



FIG.7B

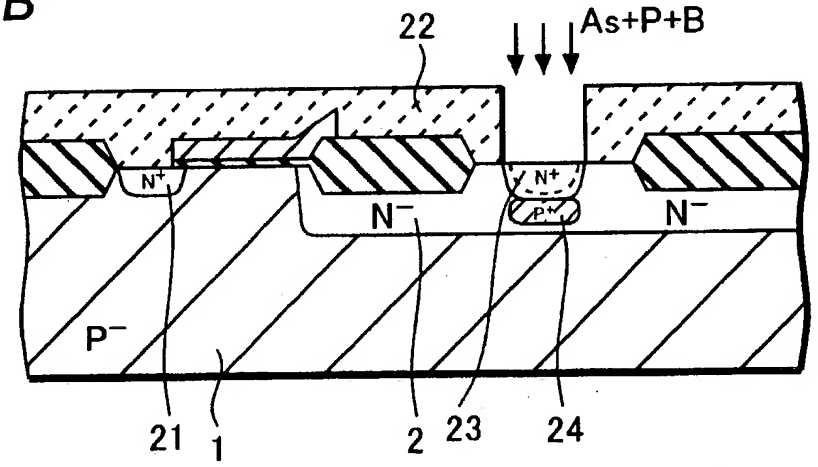



FIG.7C

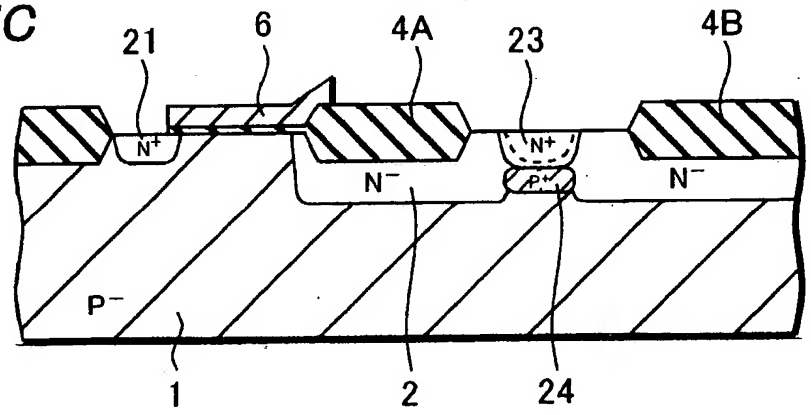


*FIG.8*

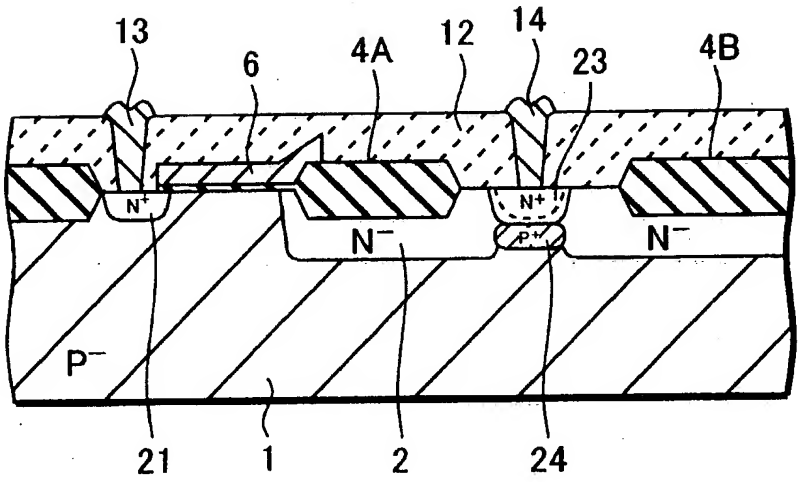


*FIG.9A*

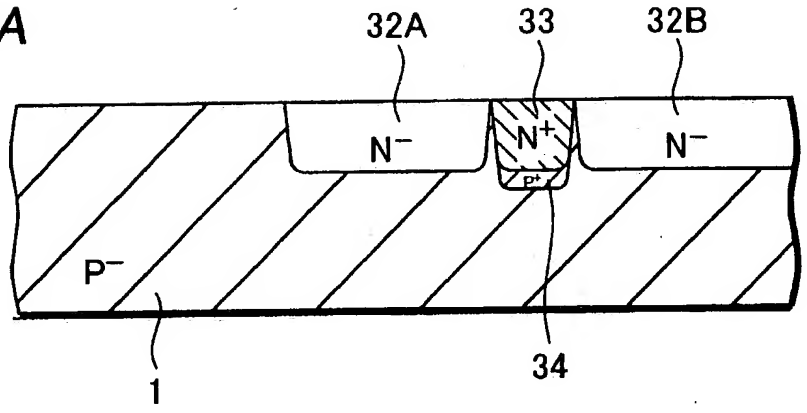



*FIG.9B*

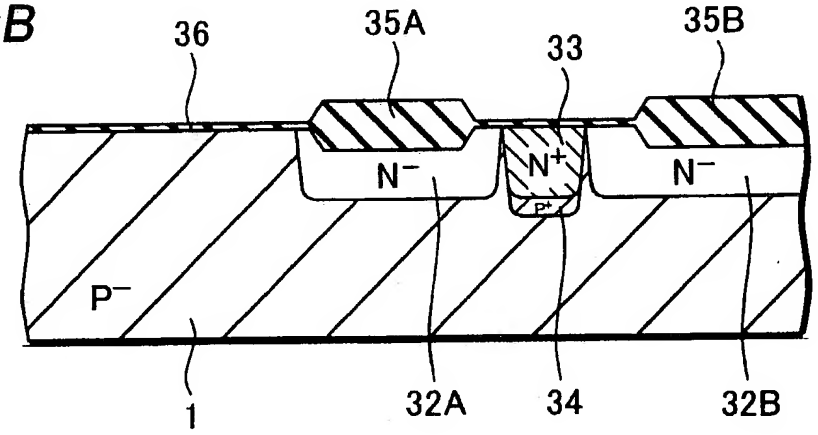



*FIG.9C*

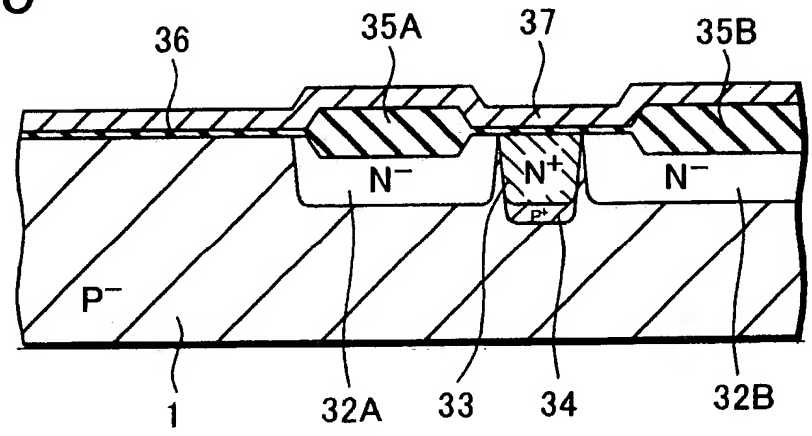


FIG.10A

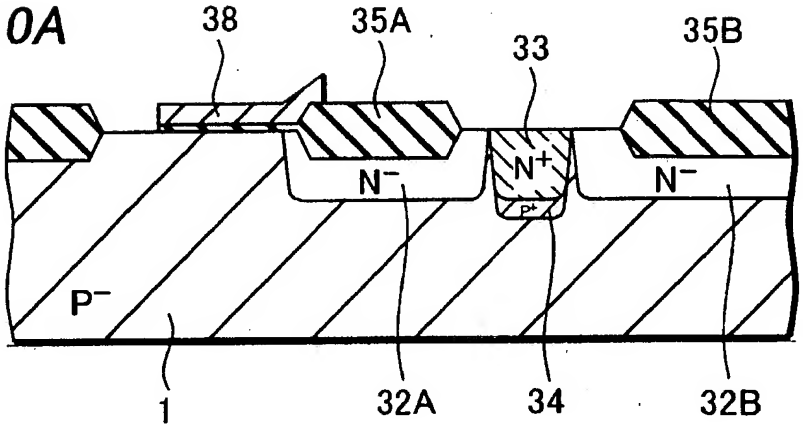



FIG.10B

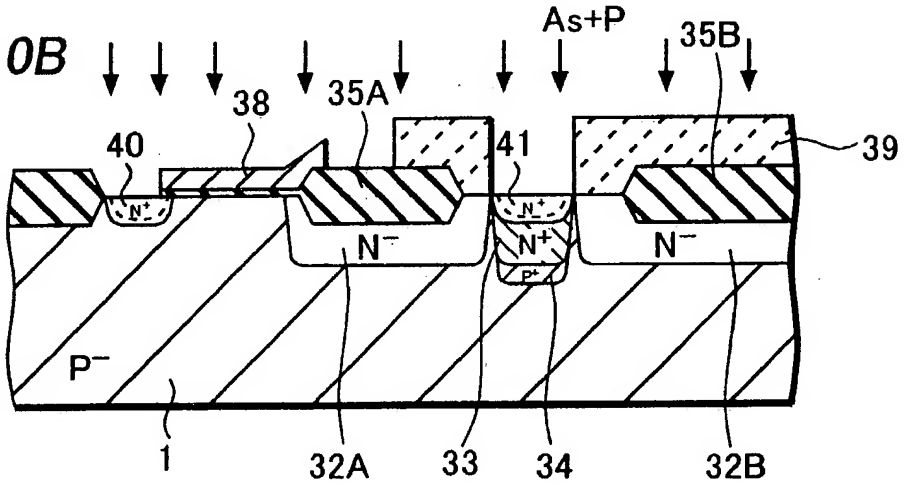



FIG.10C

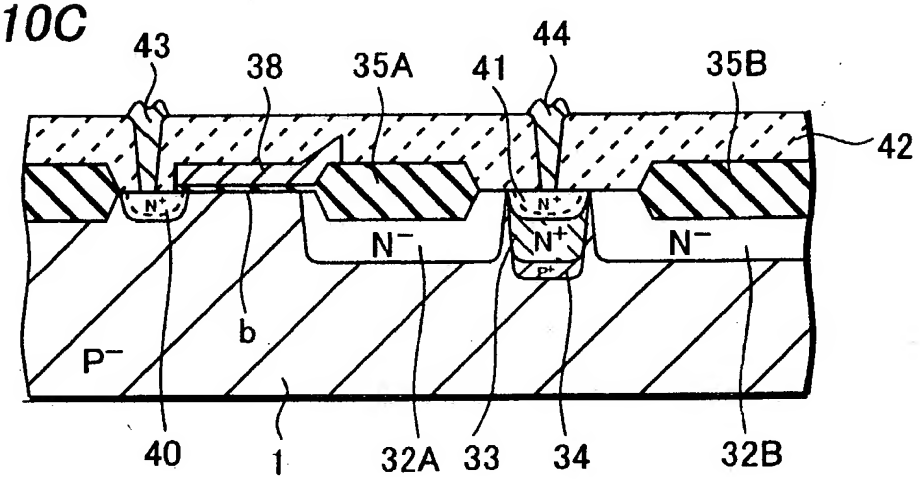


*FIG.11*

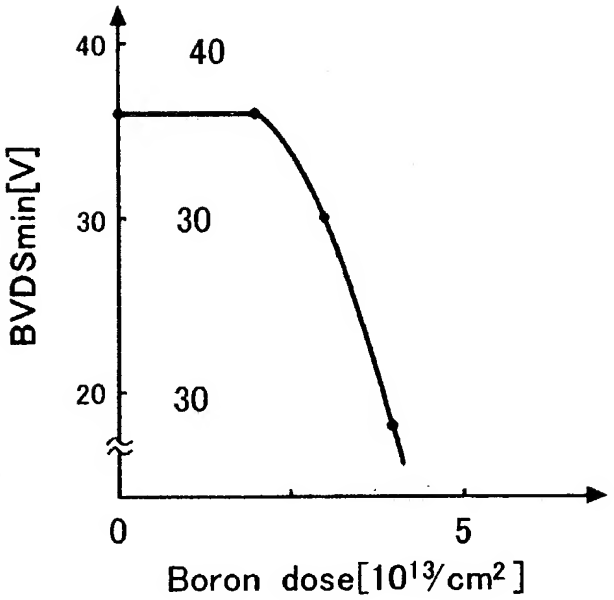

40
40
30
30
20
30
BVDSmin[V]
0
5
Boron dose[10¹³/cm²]

*FIG.12*

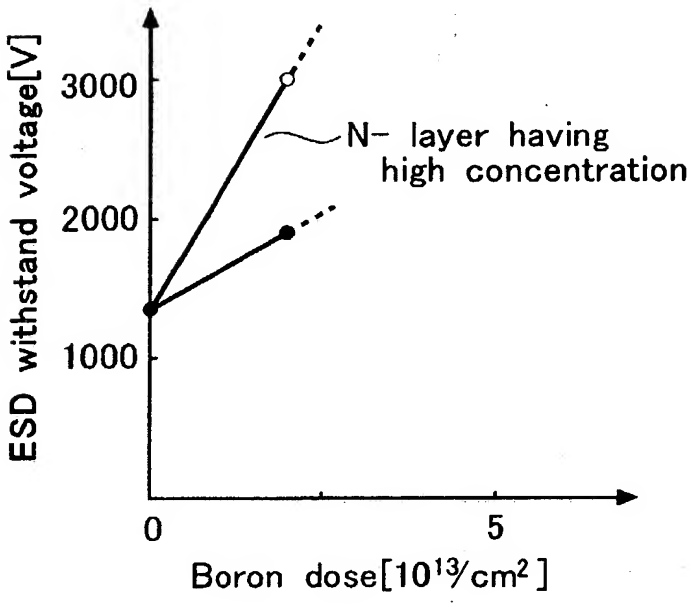

3000
2000
1000
ESD withstand voltage[V]
N- layer having
high concentration
0
5
Boron dose[10¹³/cm²]

*FIG.13*

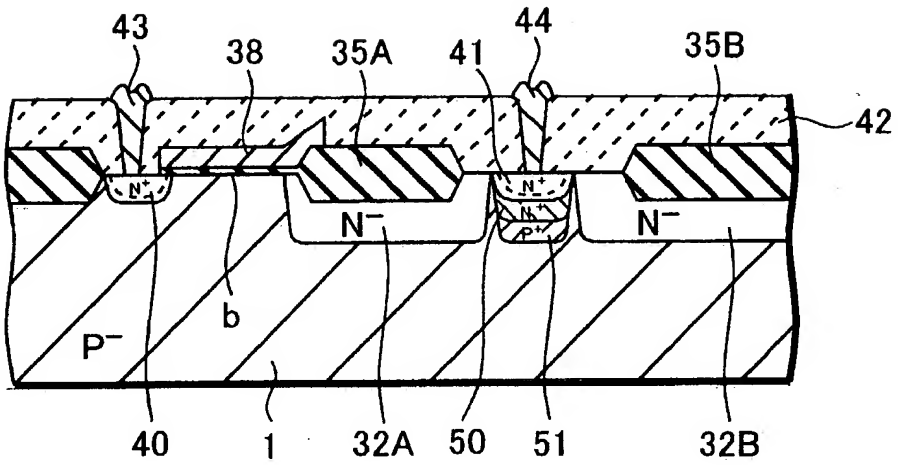
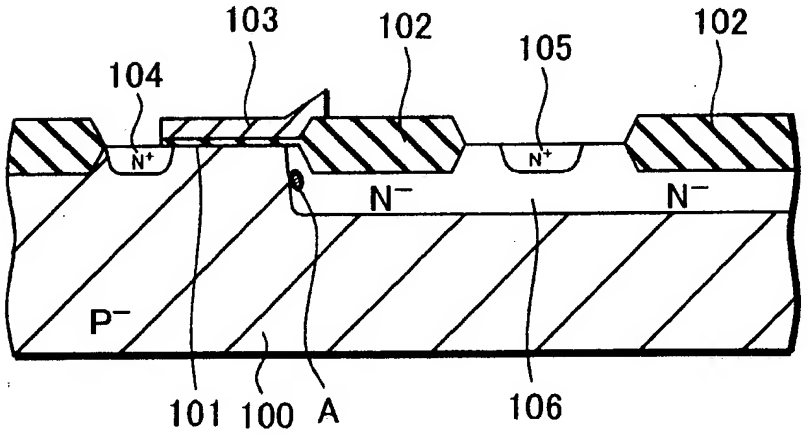

43
38
35A
41
44
35B
42
N+
N+
N+
N+
P+
N−
N−
P−
b
40
1
32A
50
51
32B

*FIG.14*


103
102
105
102
104
N+
N+
N−
N−
P−
101
100
A
106